APPENDIX G

Environmental



DEPARTMENT OF THE ARMY U.S. ARMY ENGINEER DISTRICT, SACRAMENTO CORPS OF ENGINEERS 1325 J STREET

SACRAMENTO, CALIFORNIA 95814-2922

Environmental Resources Branch

DRAFT FINDING OF NO SIGNIFICANT IMPACT PUBLIC LAW 84-99 RECLAMATION DISTRICT 150, CALIFORNIA

I have reviewed and evaluated information presented in this environmental assessment/initial study (EA/IS) prepared for the proposed levee repairs under Public Law 84-99 within Reclamation District 150, Yolo County, California. I have considered the views of other interested agencies, organizations, and individuals concerning the proposed sites.

The possible consequences of conducting the work described in the EA/IS have been studied with consideration given to environmental, socioeconomic, cultural, and engineering feasibility. The environmental effects were coordinated with the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and the Reclamation Board of the State of California. All areas disturbed by construction would be revegetated with native grasses for erosion control.

Endangered and threatened species in the project area include the valley elderberry longhorn beetle (VELB), delta smelt, green sturgeon, Central Valley steelhead, Central Valley spring-run and winter-run chinook salmon. The Corps currently is in consultation with the FWS and NMFS, and has requested concurrence of a may affect not likely to adversely affect determination for the VELB, delta smelt, and anadromous fish species. We anticipate concurrence from both NMFS and FWS. Pursuant to a Memorandum of Agreement (MOA) executed on September 15, 2006 and a second MOA executed on December 20, 2006 the project is in compliance with Section 106 of the National Historic Preservation Act of 1966; as amended. The project will have no adverse affects on National Register listed or eligible properties.

Based on my review, I have determined that the proposed modifications, including access routes and staging areas, would have no significant effects on environmental or cultural resources. Project activities would not result in permanent adverse effects on endangered species within the project area.

Based on these considerations, I am convinced that there is no need to prepare an environmental impact statement. Therefore, and EA/IS and finding of no significant impact provide adequate environmental documentation for the proposed action under the National Environmental Policy Act.

Date	Thomas C. Chapman
	Colonel, U.S. Army
	District Engineer

Draft Environmental Assessment/Initial Study

Public Law 84-99 Reclamation District 150 Sacramento River Yolo County, California



November 2007



Need for the Proposed Action

Between 28 December 2005 and 9 January 2006, the State of California experienced a series of severe storms, which damaged the levees within the U.S. Army Corps of Engineers' (Corps) Sacramento District's boundaries. Water rose a second time in April 2006 and high water remained in some parts of the system until June. Many rivers and streams within the Sacramento and San Joaquin River Basins ran above flood stage during these events, and there were significant erosion and seepage problems with the levees. The State of California Department of Water Resources and/or their maintaining agencies conducted flood fight activities while the Corps has been working with the State to restore the levee systems to pre-storm conditions. These efforts have been conducted under the authority of Public Law 84-99, Rehabilitation of Damaged Flood Control Works.

High flow in the Sacramento River in December 2005 and January 2006 saturated the waterside levee slope destabilizing sections of the levee within Reclamation District (RD) 150 (see Plate 1). Erosion of the waterside levee slope was observed at 17 locations during a site visit in June 2007 (see Plate 2). The damages are extensive and may result in continued deterioration and loss of the levee, leaving the area unprotected for the next flood event. The repairs sites along the Sacramento River in RD 150 are located in Yolo County, California, just south of Clarksburg, California. The Sacramento River levee, managed by the RD 150, protects the agricultural area of Merritt Island and the town of Clarksburg. A breach in the levee system may flood the entire area with potential for loss of lives and large adverse economic impacts. The descriptions of the damaged sites are described in the following table:

Table 1.0: Description of Levee Damages, Sacramento River, RD 150

Site Number	Length	Height	Damage Description
	(feet)	(feet)	
002	132	5	Intermittent erosion of levee toe.
003	158	4	Intermittent erosion of levee toe.
004	427	3-4	Wave wash erosion above existing rock
			protection. Loss of existing rock
			protection.
005	2,455	3-4	Intermittent erosion of levee toe. Wave
			wash erosion above existing rock
			protection. Loss of rock protection.
006	15		Continuous scallop of levee embankment
			under water.
007	53	3	Erosion of levee toe.
008	15	5	Scour hole of levee slope above rock
			protection. Loss of rock protection.
010	1,753	12	Erosion of levee slope and loss of rock
			protection.
011	103	3-5	Wave wash and levee toe erosion.

Table 1.0: Description of Levee Damages, Sacramento River, RD 150 (cont.)

Site Number	Length	Height	Damage Description
	(feet)	(feet)	
012	297	3	Erosion of levee toe and extends below
			water line. Erosion of levee slope above
			and below existing rock protection. Loss
			of rock protection.
013	104	12	Wave wash erosion of levee slope. Loss of
			rock protection. Levee slope unstable.
014	52	10	Wave wash erosion of levee slope. Loss of
			rock protection. Levee slope unstable.
015	256	10	Wave wash erosion of levee slope. Loss of
			rock protection. Unstable levee slope.
016	5		Scour into levee slope adjacent to existing
			building.
017	91	5	Erosion of levee toe.
018	837	10-12	Erosion of levee slope. Loss of rock
			protection. Unstable levee slope.
019	178	8-10	Erosion of levee slope above and below
			existing rock protection. Loss of rock
			protection.

Alternatives

No Action

The National Environmental Policy Act requires that the lead agency, the Corps, present a no action alternative that establishes the baseline conditions against which the action alternatives are compared. The no action alternative is used to analyze beneficial and adverse effects, measure level of impact significance, and enable to Corps to make informed and reasoned decisions. Under the no action alternative, the Corps would not repair the damaged levees; the RD would be the responsible party for providing all funding and/or work required for final repairs of flood damages to the levee structures. Possible delays or "no action" (not repairing the erosion damage) would allow the levees to continue eroding until they would ultimately fail during the next, or subsequent flood events.

This levee is protecting an agricultural area and several homes where lives are at risk and where there may be large, adverse economic impacts. Without any repairs the entire flood control project is reduced to a 1 year frequency event. Due to the reasons stated above, the no action alternative is not recommended and therefore, not carried forward in this document.

Proposed Actions

The Corps has inspected the damages at the 17 sites along the Sacramento River and determined the following repairs would be the most effective way to repair the sites. No other alternatives have been considered for analysis in this document.

Sacramento River, sites 010, 013, 014, 015, 018, and 019. Repairs consist of clearing the levee of vegetation and excavating in steps the eroded levee slope at least 0.5 foot beyond the damaged surface (see Plate 3). The waterside levee slope would be reconstructed to 3(H):1(V) slope. To assure proper bonding, the levee slope would be reconstructed with new back fill material. The levee slope would be reconstructed to preflood conditions with impervious fill. The existing rock protection would be removed, stockpiled, and reused. Lost rock protection would be restored to the thickness and height of the adjacent undamaged areas. The reconstructed levee slope would be seeded with native grasses.

<u>Sacramento River, sites 002-008, 011, 012, 016, and 017</u>. The repairs consist of reconstruction of the levee toe with compacted impervious fill and restoration of the lost rock protection to the height and thickness of adjacent undamaged areas (see Plate 4). The levee slope would be cleaned and grubbed at least 10 feet above the eroded area. The rock protection would be placed on a 6-inch-thick layer of bedding material.

Environmental Impacts of the Proposed Action

Traffic. The project is located in a rural area of Yolo County, California. South River Road runs on top of the levee crown and is used by farmers and commuters. During construction, truck traffic along South River Road would increase as material is brought into the sites for repairs. This traffic is expected to have a short term impact on local traffic. The additional truck traffic would occur during project construction. Once the project is complete, the traffic on South River Road would return to the existing level. The construction manager would choose staging areas that would have minimal to no affect on traffic conditions. Additionally, the construction manager would implement the best management practices to prevent impacts on traffic and provide safety measures for motorists using the levee road.

Water Quality. During construction of the new levee, small amounts of debris could fall into the Sacramento River. Water levels are low during the time of year when construction would take place. Any sediment that would fall into the water would most likely settle out and not move through the system. Best management practices, such as using coir mats and hydroseeding disturbed areas, would be used to reduce the risk of debris entering the water. Construction equipment maintenance would not occur at the project site to reduce the possibility of discharge of engine materials and waste into the Sacramento River. The surface water or the groundwater quality is not expected to change from the existing conditions with project construction. Construction of the project would not degrade ambient water quality conditions in any manner.

Vegetation and Wildlife. Approximately 6,931 feet of damaged levee will be repaired. Currently, shrubs, large trees, and grasses grow on the levee and within the project area. Many of the shrubs and trees grow along the water's edge and provide shaded riverine habitat. The trees, shrubs, and grasses provide habitat for birds, mammals, reptiles and fish. Project construction would result in a loss of the smaller trees and shrubs on the levee slope and toe. The larger trees on the levee slopes would be trimmed and construction would avoid removal whenever possible. All of the grass and weedy vegetation would be removed from the levee slopes before project construction. Upon completion of project construction the reconstructed levee slopes would be reseeded with native grasses and willow pole cuttings would be installed along the levee toe. These actions would re-establish the shaded riverine habitat and terrestrial habitat disturbed by project activities. See Appendix A for the FWS Planning Aid Letter.

Fisheries. The Sacramento River in RD 150 provides habitat for many native and non-native fish species. Special status fish species are addressed in the endangered species section below. In general, native fish species spawn in the early spring. Non-native fish species generally spawn in late spring or early summer. Project construction would not occur during the spawning times for most native fish species. Fish species located at project construction would likely move to other locations of the river as a result of noise and water turbidity caused by project construction. These effects to fisheries are expected to be short term and last only as long as project construction. There would be no adverse effects on fisheries as a result of project construction.

Endangered Species. A field visit with the U.S. Fish and Wildlife Service (FWS) occurred on June 18, 2007. Elderberry shrubs, which provide critical habitat for the Federally listed Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (VELB), were located on the landside levee toe at sites 014, 016, and 017. These areas may be used by construction personnel as staging areas or parking areas. To prevent adverse affects to the VELB the Corps would create a 20 foot buffer zone around the shrubs. The Sacramento River supports the population of the State listed Delta smelt (*Hypomesus transpacificus*). The project area is used by the delta smelt as an adult and juvenile migration corridor and for juvenile rearing. The work would occur during a time when the delta smelt would not likely be present. Construction would result in a loss of shaded riverine habitat. The delta smelt use shaded riverine habitat while migrating and rearing young. Willow pole cuttings would be planted after the levee repairs are complete. The willow pole cuttings would restore the shaded riverine habitat. The Corps would request concurrence of a not likely to adversely affect listed species from FWS prior to project construction.

A field visit with the National Marine Fisheries Service (NMFS) occurred on July 5, 2007. The Sacramento River supports populations of the Federally listed green sturgeon (*Acipenser medirostris*), Central Valley steelhead (*Oncorhynchus mykiss*), Central Valley spring-run chinook salmon and winter-run chinook salmon (*Oncorhynchus tshawytscha*). The project area is used by these anadromous fish species as an adult and juvenile migration corridor and for juvenile rearing. Project construction

would occur during the work construction windows for these listed species. The fish would not likely be in the project area during the time of construction. Construction at some sites would result in the loss of critical habitat for the steelhead and chinook salmon. The Corps would plant willow pole cuttings to reestablish the lost shaded riverine habitat. Willow pole cuttings would be planted at sites that currently have no shaded riverine habitat in order to establish habitat. Planting pole cuttings at sites that have not shaded riverine habitat provides a benefit to the habitat and to listed fish species. The Corps would request concurrence from NMFS of a may affect, not likely to adversely affect listed species as a result of project effects to designated critical habitat. Construction would occur during the summer of 2007 and would be completed by October 1, 2007. Since repairs would be constructed during the construction window for the listed fish species the Corps would not adversely affect the anadromous fish species. Should project construction continue past October 1, the Corps would initiate formal consultation with NMFS for project affects to the endangered fish species.

Cultural Resources. On December 20, 2006, to comply with Section 106 of the National Historic Preservation Act (NHPA), and in consultation with the State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation, the Corps executed a Memorandum or Agreement (MOA) for the Order 3, 4, and 5 PL 84-99 projects. The MOA stipulates a series of steps to take in order to take into account the effects of the project on historic properties. It also determines that for the purposes of the undertaking only, the Sacramento and San Joaquin River Basins levee system will be considered eligible for listing in the National Register of Historic Places (NRHP).

In order to obtain a determination of no adverse effect to the levee systems, the MOA allows that when levee repairs will restore the original prism shape of the levee, the project will not adversely affect historic properties. When the levee or associated features are the only historic properties that will be adversely affected by the proposed project, the Corps will prepare documentation similar to Historic American Building Survey/Historic American Engineering Record (HABS/HAER) Level IV inventory cards showing the historic property before and after levee repair. Additionally, as stipulated by the MOA, potentially interested Native Americans will be sent letters asking for their comments and information on areas of concern.

A records and literature search for the presence of cultural resources within the area of potential effects (APE) was conducted at the Northwest Information Center of the California Historical Resources Information System, located at California State University, Sonoma. The search was negative for known cultural resources within the APE. Field inspections of the APE will be conducted before project construction and any historic properties discovered will be treated in accordance with the MOA. As stipulated by the MOA: (1) if the levee is the only historic property discovered within the APE it will be documented, and (2) if any other unknown cultural resources within the APE that cannot be avoided by project construction are discovered during field inspections, they will be inventoried, evaluated, and their eligibility to the NRHP will be consulted on separately with SHPO. Because the MOA has been executed and the records and

literature search has been completed, the project is in full compliance with Section 106 of the NHPA and the project should have no adverse affects on any cultural resources.

Conclusions

The proposed alternatives for the several sites would have only temporary affects to traffic, fisheries, vegetation and wildlife. The Corps is currently in formal consultation with FWS and NMFS for affects to endangered species and is requesting concurrences of not likely to adversely affect any Federally or California State listed endangered species. Planting of willow pole cuttings would provide habitat for endangered fish species and other wildlife in the area. Because no significant impacts are expected, a draft Finding of No Significant Impact is included as part of this document for review.

Agencies and Persons Consulted

U.S. Fish and Wildlife Service, -Doug Weinrich, Chief, Habitat Conservation Division, Sacramento Fish and Wildlife Office

National Marine Fisheries Service, -Madelyn Martinez, Fisheries Biologist, Sacramento Area Office

State Historic Preservation Officer, Office of Historic Preservation, -Dwight Dutschke, Associate Park and Recreation Specialist; David Byrd, State Historian

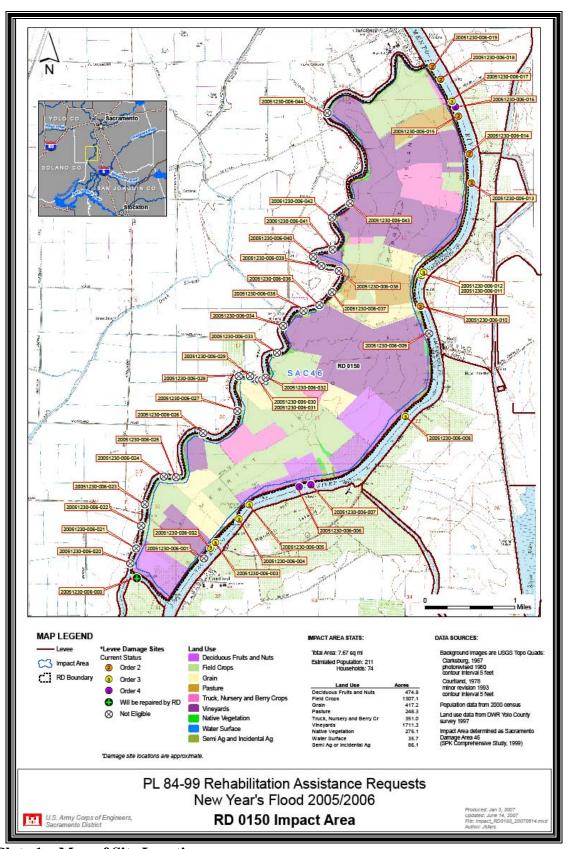


Plate 1 – Map of Site Locations



Plate 2 – Erosion Damage and Lost Rock Protection

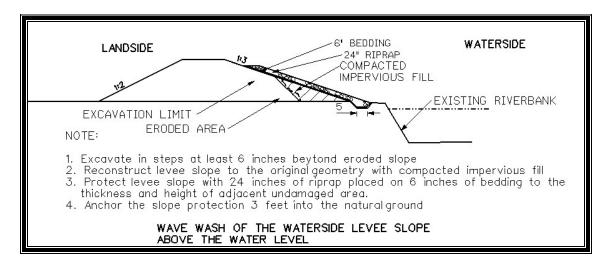


Plate 3 – Repair Alternative for Sites 010, 013, 014, 015, 018, and 019

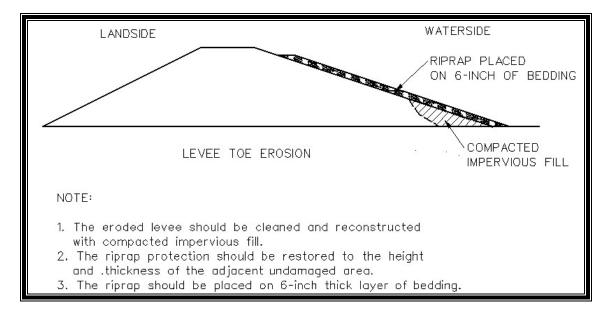


Plate 4 – Repair Alternative for Sites 002-008, 011, 012, 016, and 017

Appendix A Planning Aid Letter





United States Department of the Interior

FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office 2800 Cottage Way, Room W-2605 Sacramento, California 95825-1846 PISH A WILDLIFE SERVICE

In reply refer to: 1-1-07-I-1431

OCT 1 0 2007

Mr. Francis C. Piccola Chief, Planning Division U.S. Army Corps of Engineers 1325 J Street Sacramento, California 95814-2922

Subject:

Request for Additional Information on the Proposed PL 84-99 Levee

Repairs within Sacramento River Reclamation District 150, Yolo County,

California

Dear Mr. Piccola:

This letter is in response to your July 27, 2007, letter requesting concurrence with a may affect not likely to adversely affect determination for the proposed levee repairs within the Sacramento River Reclamation District 150, (proposed project) Yolo County, California. The U.S. Fish and Wildlife Service (Service) received your request on July 30, 2007. The proposed project involves restoring the levee structure to the pre-flood level of protection at 17 sites along the Sacramento River and totaling 6,931 linear feet of repair. Construction consists of clearing vegetation from the levee slope, removing shrubs, trimming trees, excavating the slope, and filling with impervious material. At issue are the potential effects of the proposed project on two federally threatened species: valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) and delta smelt (*Hypomesus transpacificus*). Upon review of the supporting documentation, the Service has determined the proposed project is likely to adversely affect the delta smelt. Our primary concern and mandate is the protection of federally-listed species pursuant to the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act). Therefore, formal consultation pursuant to the Act is necessary.

The Service has reviewed the following documents: (1) July 27, 2007, Corps draft Environmental Assessment/Initial Study and Finding of No Significant Impact for the Public



Mr. Francis C. Piccola 2

Law 84-99, Reclamation District 150, Sacramento River, Yolo County, California received in our office on July 27, 2007; (2) a letter from the US Army Corps of Engineers requesting section 7 consultations for the 17 sites under Public Law 84-99, Sacramento River Reclamation District 150, Yolo County, California. The letter was received in our office on July 30, 2007; (3) electronic correspondence from Kristen Riesche clarifying project details received on September 12, 2007, and September 13, 2007; and (4) other information available to the Service. If there is additional information regarding effects of the proposed action please forward it to this office as soon as possible.

The Service has not received all of the information necessary to initiate formal consultation on the proposed project as outlined in the regulations governing interagency consultations (50 CFR §402.14). The supporting documentation for the proposed project does not contain a level of detail sufficient to prepare a biological opinion. To complete the initiation package, we will require the following information:

- A detailed project description including construction techniques and design features.
 Including those that would avoid and/or minimize proposed project affects to delta smelt, valley elderberry longhorn beetle, and their habitats.
- o A detailed description of all temporary, permanent, and cumulative effects from the project on delta smelt and valley elderberry longhorn beetle and their habitats.

Additional guidance on submitting a project for evaluation under section 7 of the Act can be found on our web site (http://www.fws.gov/sacramento) under the heading "Planning and Consultation Information."

Until we receive all of the information requested, the Service will not begin the formal consultation process for the proposed PL 84-99 Levee Repairs within Sacramento River Reclamation District 150, Yolo County, California. If you have any questions or concerns, please contact Stephanie Rickabaugh or the Acting Sacramento Valley Branch Chief, at (916) 414-6600.

Sincerely,

Peter A. Cross

Peter A. Cross

Deputy Assistance Field Supervisor

cc:

Elizabeth Holland, Corps, Sacramento, California Madelyn Martinez, NMFS, Sacramento, California



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802-4213

September 5, 2007

In response refer to: 2007/05278

Francis C. Piccola Chief, Planning Division U.S. Army Corps of Engineers 1325 J Street Sacramento, California 95814

Dear Mr. Piccola:

This is in response to your letter of July 18, 2007, requesting initiation of consultation and concurrence from NOAA's National Marine Fisheries Service (NMFS) for the Public Law (PL) 84-99 Levee Repair project on the Sacramento River in Reclamation District 150, Yolo County, California. We received the letter on July 23, 2007. You have determined the proposed project may affect, but is not likely to adversely affect Federally listed threatened Central Valley steelhead (Oncorhynchus mykiss), endangered Sacramento River winter-run Chinook salmon (O. tshawytscha), and threatened Central Valley spring-run Chinook salmon (O. tshawytscha), or their designated critical habitat, and the Essential Fish Habitat (EFH) of Pacific salmon.

U.S. Army Corps of Engineers (Corps) plans to restore 17 sites along the levee structure to preflood level of protection, along the Sacramento River, totalling 6,931 linear feet of repair. Construction consist of clearing vegetation from the levee slope, removing shrubs, trimming trees, excavating the slope, and filling with impervious material. Construction activities would occur at the toe of the levee and in the river on several of the sites and would occur between June 1 and September 30.

The following Federally listed species (Evolutionarily Significant Units (ESU) or Distinct Population Segments (DPS)) and designated critical habitat occur in the action area and may be affected by proposed project:

Sacramento River winter-run Chinook salmon ESU (Oncorhynchus tshawytscha) endangered (June 28, 2005, 70 FR 37160)

Sacramento River winter-run Chinook salmon designated critical habitat (June 16, 1993, 58 FR 33212)

Central Valley spring-run Chinook salmon ESU (Oncorhynchus tshawytscha) threatened (June 28, 2005, 70 FR 37160)

Central Valley spring-run Chinook salmon designated critical habitat



(September 2, 2005, 70 FR 52488)

Central Valley steelhead DPS

(Oncorhynchus mykiss) threatened (January 5, 2006, 71 FR 834)

Central Valley steelhead designated critical habitat

(September 2, 2005, 70 FR 52488)

Southern DPS of North American green sturgeon

(Acipenser medirostris) threatened (April 7, 2006, 71 FR 17757)

The Pacific Fisheries Management Council has identified EFH for the Pacific salmon fishery in Amendment 14 to the Pacific Coast Salmon Fishery Management Plan. This EFH designation includes habitat found in the action area (Sacramento River Hydrologic Unit -18020109).

NMFS has reviewed the information provided with your letter and has found that we are unable to concur with your determination that the proposed project is not likely to adversely affect Federally listed species or their designated critical habitat. A determination of "not likely to adversely affect" is appropriate only when it is clearly demonstrated that the effects of the proposed project on listed species are expected to be discountable (*i.e.*, extremely unlikely to occur), insignificant (*i.e.*, the impacts of the proposed project should never reach the scale where take of listed species occurs), or completely beneficial (*i.e.*, contemporaneous positive effects without any adverse effects to listed species). The information provided by the Corps is a short description of the proposed project, a general design of the levee repair, and damage description provided during a field review. This information does not provide any supporting reasoning for a "not likely to adversely affect" determination, nor does it include the information described per 50 CFR 402.14(c) necessary for formal consultation. Additionally, given that the essential elements of EFH for Pacific salmon are similar to the primary constituent elements for designated critical habitat of listed salmonids, the Corps' proposed activities would also have the potential to adversely affect EFH.

Based on the information provided and previous consultations with the Corps for bank protection projects, we believe the 6,913 linear feet of levee repair may have substantial adverse effects on listed species. The project area is in a section of the Sacramento River with limited shaded riverine aquatic habitat due to sparse riparian vegetation along the river banks. The clearing and grubbing of the remaining vegetation along the project reach will exacerbate this problem and is likely to adversely affect Federally listed species and their critical habitat. We recommend the Corps initiate formal section 7 consultation for this project. In order for NMFS to conduct a thorough analysis of the potential effects of the proposed project on listed species and critical habitat, we will require the following information, as outlined in the regulations governing interagency consultation (50 CFR §402.14):

(1) A detailed project description including construction techniques and integrated design features that will minimize and mitigate for the permanent and temporary reductions in the conservation value of critical habitat. These features may include, but are not limited to, avoidance and minimization measures to prevent loss of riparian

function, seasonal in-water work periods, and Best Management Practices for maintaining water quality.

- (2) A description or analysis of the manner in which the action may affect any listed species or critical habitat, and an analysis of any direct, indirect, or cumulative effects. This analysis would include impacts from both construction and operation of the proposed project and any interdependent or interrelated activities. The Corps should use the Standard Assessment Method (SAM) to quantify the impacts to life-stage of Federally-listed fish with the action area.
 - (a) Assess the exposure of listed species and critical habitat to elements of the action that have potential environmental consequences and the potential to result in adverse impacts to listed anadromous fish and their habitat. If no adverse effects are expected, the analysis should clearly articulate the physical, chemical, and biotic factors that lead to that determination. Species are exposed to the physical, chemical, and biotic stressors of an action when their spatial and temporal distributions overlap. The Corps should describe the spatial and temporal co-occurrence between action-related stressors and listed species, as well as any direct or indirect exposure pathways. Assessment steps should consider:
 - i) the specific physical, biotic, and chemical stressors to which individual members of listed species would be exposed;
 - ii) the pathway of exposure (i.e., is exposure direct or indirect);
 - iii) the location that exposure is expected to occur;
 - iv) the species and life history stages that will be exposed;
 - v) the number of individuals that will be exposed;
 - vi) the timing, magnitude, duration, and frequency of exposure; and
 - vii) how exposure might vary depending upon the characteristics of the environment, stressor intensity, and individual behavior.
 - (b) Assess the response of exposed individuals. After determining that individual members of listed species will be exposed to one or more physical, chemical, and biotic stressors produced by an action, this step is used to evaluate the available evidence to determine:
 - i) how individuals will respond to the exposure;
 - ii) whether the probable exposure would be sufficient to evoke particular responses; and
 - iii) the particular response expected for each exposed species and life stage.
- (3) Relevant reports, including any environmental impact statements, environmental assessments, biological assessments, or other analysis prepared on the proposal.

(4) Any other relevant studies or other information available on the action, the affected listed species, or critical habitat.

The Corps should conduct an assessment of the effects of the proposed action on EFH (50 CFR 600.920(g)(1)(2)) to determine the appropriate effects determination for EFH for Pacific Salmon.

The ESA consultation process for this project will not be initiated until we receive all of the information necessary to initiate consultation, or a statement explaining why that information cannot be made available, and a written assessment of the effects of the action on EFH (50 CFR 600.920(g)(1)(2)). Once we receive all of the information necessary to initiate and complete consultation, we will review it and contact you with a determination of our findings on this project.

Please contact Madelyn Martinez at (916) 930-3615, or via e-mail at Madelyn.Martinez@noaa.gov if you have any questions regarding this letter.

Sincerely,

Rodney R. McInnis
Regional Administrator

cc: Copy to file - ARN 151422SWR2007SA00488

NMFS-PRD, Long Beach, California

Tanis Toland and Liz Holland, U.S. Army Corps of Engineers, 1325 J St. Sacramento, California 95814

Doug Weinrich, Jennifer Hobbs, and Kim Turner, USFWS, 2800 Cottage Way, Sacramento, California 95825

Gary Hobgood, CDFG, 1701 Nimbus Road, Suite A, Rancho Cordova, California 95670